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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,478	07/30/2003	Patricio Nilo	1065.43	9198

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EXAMINER

WILSON, JOHN J

ART UNIT	PAPER NUMBER
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3732

DATE MAILED: 06/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/630,478	Applicant(s) NILO ET AL.	
	Examiner John J. Wilson	Art Unit 3732	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 8-17, 19-21 and 23-25 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-17, 19 and 20 is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-11, 21 and 23-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 8-11, 21, and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Porter et al (6887077) in view of Lorenzi (2002/0094508). Porter shows a method of expanding bone tissue including providing multiple expanders, column 4, lines 52-64, the expanders having a shaft 52, threaded expansion tip 60 having a thread the same as the implant except the major diameter of the thread 60 is smaller than the major diameter of the thread 20 on the implant 10, column 4, lines 22-24 and lines 55-60, the method further comprising, creating an osseotomy site using a pilot drill, Fig. 4A, screwing a first threaded expander 50, fig. 3, in the site, Fig. 4C, to expand the site laterally by pushing bone tissue radially, it is noted here that in Porter, the only bone that is expanded is the bone at the threads, however, this meets the claim language of "expanding said osseotomy site laterally by pushing bone tissue away radially from a longitudinal axis", claim 1, paragraph (c). Retrieving the tool is inherent in the shown method. Porter further shows repeating these steps, column 4, lines 55-67 and column 5, lines 27-43, see specifically, lines 37 and 38, as needed, increasing the outer diameter of the threads and therefore increasing the outer diameter of the implant site, to a diameter less than the implant, column 4, lines 22-24 and lines 55-60. Porter

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does not show depth markings. Lorenzi shows markings 19. It would be obvious to one of ordinary skill in the art to modify Porter to include markings as shown by Lorenzi in order to better judge depth. To allow the expander to stay in the site for a time is an obvious matter of choice in the degree of a known parameter of compressing bone to one of ordinary skill in the art. Porter teaches using a pilot drill 30 to form a hole that is 2.5 mm in diameter, column 3, lines 66 through column 4, line 8, and teaches an outer diameter of the implant as being 4.5 mm, column 3, lines 24-33. As such the difference between the diameter of the pilot hole and the outer diameter of the implant is 2 mm. The present disclosure teaches a range of expanders of 2.8 mm to 5.5 mm and teaches that the last expander is .2 to .5 mm smaller than the outer diameter of the implant, as such, the range of outer diameter of the implant taught is 2.8 - .2 mm to 5.5 - .5 mm or 2.6 to 5 mm. The present disclosure also teaches using a pilot drill diameter in the range of 1.5 to 2.5 mm. As such the pilot hole of Porter of 2.5 mm is in the range taught by the present application and the outer diameter of the implant of Porter of 4.5 mm is also within the range as taught by the present application, therefore, the difference between the outer diameter of the implant and the pilot hole drilled is held to be "substantially smaller" and meets the claim language. As to claim 2, see using same thread as implant, column 4, lines 28 and 29. As to claims 4 and 25, Porter teaches a final diameter that is .25 less than the outer diameter of the implant, column 4, lines 52-65. As to claims 9, 10 and 25, the degree of the first expansion is an obvious matter of choice in degree of a known parameter to one of ordinary skill in the art. As to claim 11, Porter does not show a ratchet. Lorenzi teaches using a drill or wrench, [0022]. It would

be obvious to one of ordinary skill in the art to modify Porter to include a wrench as shown by Lorenzi in order to make use of known drivers in the art. The specific type of tool used is an obvious matter of choice in known tools to the skilled artisan. As to claim 24, see Fig. 6 of Lorenzi.

Allowable Subject Matter

Claims 12-17, 19 and 20 are allowed.

Response to Arguments

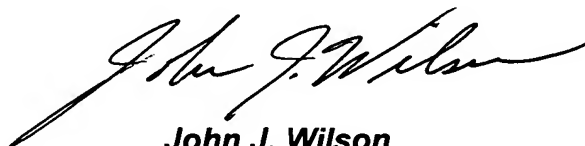
Applicant's arguments filed May 9, 2006 have been fully considered but they are not persuasive. It is held that because the teachings of size in Porter are within the ranges of sizes taught in the present application, see above, the relative size of the pilot hole to the outer diameter of the implant inherently meets the claim language. As to claim 21, the relative sizes are obvious in view of the teachings of Porter and the choice of one of ordinary skill in the art in size parameters, and it is also noted, that the claiming of size with respect to an inferentially claimed implant is as broad as there exists implant that the claimed elements may be used with.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Wilson whose telephone number is 571-272-4722). The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Bianco, can be reached at 571-272-4940. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John J. Wilson
Primary Examiner
Art Unit 3732

jjw
June 9, 2006